REMARKS

Claims 1-12 and 36-49 have been pending in this application. Claims 1, 6, 8, 36, 44, and 48 are being amended to further the prosecution of the application. No new matter is added. All claims are believed to be in condition for allowance.

Summary

One aspect of the present invention is directed towards achieving higher data rates based on more efficient allocation of CDMA (Code Division Multiple Access) wireless channels. Instantaneous bandwidth needs of an on-line subscriber unit can be met by dynamically allocating traffic channels on an as-needed basis for each session. For example, multiple traffic channels can be granted during times when the subscriber bandwidth requirements are relatively high, such as when downloading web page information. Conversely, traffic channels can be released during times when the line content is relatively light, such as when the subscriber is reading a web page that was previously downloaded. An idle connection can be maintained with a subscriber unit in which no traffic channels are allocated for data payload transfers.

According to the principles of the present invention, the method of maintaining traffic channels can include allocation and deallocation of multiple traffic channels based upon request messages received at a base station transceiver from a remote transceiver. For example, while in an idle mode when no traffic-type channels are assigned for use to transmit payload data information to a base station transceiver, the remote transceiver can receive at least part of a data payload from a computer device. Typically, the data payload is expected to be transmitted over the wireless link to the base station transceiver. Following detection of the presence of the data payload, the remote transceiver generates and transmits a request message to the base station transceiver for an assignment of a set of traffic channels to transmit the data payload. In response to receiving the request message from the remote transceiver, the base station transceiver can assign the set of traffic channels for use by the remote transceiver to transmit the data payload to the base station transceiver over the wireless link.

Once traffic channels are allocated for use and the data is transmitted to the target using the multiple traffic channels, the remote transceiver can transmit a release message to the base station transceiver indicating that previously assigned traffic channels are no longer needed to

transmit information to the base station transceiver. In response to receiving this release message at the base station transceiver, the base station can deallocate use of the traffic channels so they can be reassigned for use by another remote terminal attempting to transmit data information to the base station.

This method of allocating traffic channels and transmitting data payload information is advantageous because multiple traffic channels can be assigned for use when throughput larger than that provided by a single channel is needed and the data payload is present for transmission to a target device instead of needlessly being continuously assigned to a wireless device that is not transmitting data information.

Rejections Under 35 U.S.C. § 103

Claims 1-12, 36-43 and 49 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Kim (US 6,438,119) in view of Jawanda (US 6,243,581). This rejection is respectfully traversed and reconsideration is requested.

It is well accepted that for a claim to be rendered obvious, the prior art reference (or references when combined) must teach or suggest all of the claim limitations. *In re Vaeck*, 947 F.2d 488, 20USPQ2d 1438 (Fed.Cir. 1991).

According to amended Claim 1, multiple traffic channels are used to transmit the payload data over the wireless communication link, such that a first portion of the payload data is transmitted over a first traffic channel and a second portion of the payload data is transmitted over a second traffic channel. None of the cited references teach or suggest these aspects of the invention, nor do they teach its advantages over the prior art. Moreover, the cited references do not disclose a system or method for assigning multiple traffic channels at the same time. Thus, it is respectfully submitted that the invention as recited in the amended claims includes a limitation not taught or disclosed by any of the references.

Kim teaches a communication system in which a dedicated control channel is provided for communicating control messages between a base station and a mobile station (Abstract, lines 1-3). When a mobile station generates a control message for requesting allocation of a single reverse packet traffic channel, the base station generates a control message for allocating the reverse packet traffic channel, after which the base station and the mobile station transition to the

active state where the packet traffic channel is allocated to communicate the packet data. When transmission of the packet data is complete, the mobile station generates a control message for requesting release of the reverse packet traffic channel (column 10, lines 5-18 and 30-38). After the traffic channel is deallocated, the system transitions to the control hold mode, from which it can re-transition to the active mode with one traffic channel if a new payload is received.

Kim, therefore, does not teach assigning multiple traffic channels and sending a portion of the payload over a first traffic channel while another portion of the payload is being sent by a second channel. The communication of Kim in the active mode takes place over a single traffic channel. Furthermore, there is no indication in Kim that multiple traffic channels may be assigned at the same time.

Jawanda teaches a mobile computer system capable of seamless roaming between wireless communication networks (Abstract, lines 1-3). While Jawanda does describe simultaneous wireless connections with multiple wireless communication networks, Jawanda does not teach or suggest using multiple traffic channels between a pair of the subscriber and base station nodes. Furthermore, Jawanda does not teach how such a communication is to be achieved, instead, relying on the methods of wireless communication known in the art (column 2, lines 56-63). Therefore, Jawanda does not supplement Kim's omission to teach multiple simultaneous traffic channels.

The cited references, therefore, separately or combination with each other, do not show a wireless communication architecture in which multiple traffic channels are used simultaneously to transmit portions of the payload. Therefore, independent claims 1, 6, and 36 are not obvious in view of the combination of Kim and Jawanda. Dependent claims 2-5, 7-12, 37-43 and 49 are dependent on the corresponding independent claims and are not obvious in view of Kim and Jawanda for at least the same reasons as above.

Rejection Under 35 U.S.C. § 102

Claims 34-38 have been rejected under 35 U.S.C. § 102(e) as being anticipated by Kim. This rejection is respectfully traversed and reconsideration is requested.

As discussed above, Kim does not teach or suggest simultaneously using multiple traffic channels. Amended claim 44 recites assigning multiple traffic channels and transmitting a data

payload over these assigned multiple traffic channels. Therefore, independent claim 44 is not anticipated by Kim and the rejection should be withdrawn. Dependent claims 45-47 and independent claim 48 recite the same limitation of using multiple traffic channels and, therefore, are not anticipated by Kim for at least the same reasons as above. All claims are now believed to be in condition for allowance.

CONCLUSION

In view of the above amendments and remarks, it is believed that all claims are in condition for allowance, and it is respectfully requested that the application be passed to issue. If the Examiner feels that a telephone conference would expedite prosecution of this case, the Examiner is invited to call the undersigned.

Respectfully submitted,

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